



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,020	10/17/2003	Keith W. Caruso	BRI/016	2184
7590 11/17/2005 Thomas J. Brindisi, Esq. Suite B 20 28th Place Venice, CA 90291			EXAMINER VORTMAN, ANATOLY	
			ART UNIT 2835	PAPER NUMBER

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/688,020	CARUSO ET AL.	
	Examiner	Art Unit	
	Anatoly Vortman	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,6-12 and 15-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,6-12 and 15-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/31/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 20-26, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

Regarding claims 20, 25, and 26, claim 20 recites: "the portion" in line 4 of the claim, which lacks proper antecedent basis.

Regarding claims 21-24, claim 21 recites: "a minimal clearance" which is a relative term that was not defined neither by the claims nor specification. It is not clear what range of dimensions said "minimal clearance" is referring to.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2835

4. Claims 1, 2, 4, 6, 7-12, and 15-19, and 20, are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US/4,224,487 to Simonsen.

Regarding claims 1, 2, 4, 6, 7-12, and 15-19, Simonsen disclosed (Fig. 1 and 2) a pyrotechnical circuit breaker as claimed including: an electrically conductive portion (bolt-on current load-based fuse) (15) having a flattened portion (15) and further including means (members (11) having bolt holes) for secure incorporation of the portion (15) into the electrical circuit; a pyrotechnic igniter (3) including electrical leads (1) and an output end, said igniter (3) secured so that said output end is oriented toward said electrically conductive portion (15); a passage (19) between said output end of said pyrotechnic igniter (3) and said electrically conductive portion (11, 15); a rupture area (17) adjacent said electrically conductive portion (11, 15) and on the opposite side of said electrically conductive portion (11, 15) from said pyrotechnic igniter output end, said rupture area (17) is defined in a polymeric (column 3, lines 35-40) housing (2) of the circuit breaker, and a projectile (4, 5) between said pyrotechnic igniter (3) and said electrically conductive portion (15), a housing (2) formed of polymer (column 3, lines 35-40), a projectile mounted (imbedded) into said housing (2), between said pyrotechnic igniter (3) and said electrically conductive portion (15); wherein said electrically conductive portion (15) is formed to be readily cut by said projectile (4, 5).

The process limitation that the projectile is “molded into the housing” has been construed by the Examiner as “mounted into the housing”, since “molded” is a process limitation and it has been held that determination of patentability of the product is based on the product itself, and does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the

Art Unit: 2835

prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claims 20, 25, and 26, as best understood, Simonsen disclosed (Fig. 1 and 2) a pyrotechnic circuit breaker for use in an electrical circuit comprising: a current load-based bolt-on fuse (strip) (15) including means (11) for secure incorporation into the electrical circuit, said fuse (15) being an integral single piece and having a uniform thickness; igniter (3) including electrical leads (1) and an output end, said igniter (3) secured so that said output end is oriented toward said fuse (15); a passage (19) between said igniter (3) and said fuse (15); and a rupture area (17) adjacent said fuse (15) and on the opposite side of said fuse (15) from said pyrotechnic igniter (3) output end, wherein said fuse (15) has a narrowed region between said passage (19) and said rupture area (17) (Fig. 2).

Regarding claims 21-24, as best understood, Simonsen disclosed (Fig. 1 and 2) a pyrotechnic circuit breaker for use in an electrical circuit comprising: an electrically conductive bolt-on fuse strip portion (15) including means (11) for secure incorporation of the portion (15) into the electrical circuit, wherein said electrically conductive portion (15) has an impact area and a periphery (inherently) and is formed to receive a direct ablation force; a pyrotechnic igniter (3) including electrical leads (1) and output end, said igniter (3) secured so that said output end oriented toward said electrically conductive portion (15), a passage (19) between said output end of said pyrotechnic igniter (3) and said electrically conductive portion (15); and a rupture area (17) having a perimeter (inherently) adjacent said electrically conductive portion (15) and on the opposite side of said electrically conductive portion (15) from said pyrotechnic igniter output end, wherein said impact area is flattened in a plane generally perpendicular to the output of said

pyrotechnic igniter (3) and said perimeter is selected to leave a minimal clearance between said rapture area and said periphery, wherein said fuse (15) has a narrowed region between said passage (19) and said rapture area (17) (Fig. 2).

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection. Amended claims continue to read on the reference applied as shown in the rejection above.

Conclusion

6. The Applicant's attention is directed to the US/5,990,572 (cited on IDS), which could have been also used for rejection under 35 USC 102 (b) of at least independent claims pending in the instant application.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Lynn Feild can be reached on 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Anatoly Vortman
Primary Examiner
Art Unit 2835



AV